DIRECT TESTIMONY OF
ROSE M. JACKSON
ON BEHALF OF
DOMINION ENERGY SOUTH CAROLINA, INC.
DOCKET NO. 2021-5-G

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.

A. My name is Rose M. Jackson, and my business address is 220 Operation Way, Cayce, South Carolina. I am employed by Dominion Energy Services, Inc. ("DES") as Director – Gas Supply Services.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND BUSINESS BACKGROUND.

A. I graduated from the University of South Carolina in 1988 with a Bachelor of Science degree in Accounting. Following graduation, I worked for approximately three (3) years as an accountant for a national security services firm. In 1992, I began my employment with SCANA Corporation ("SCANA") as an accountant working directly for SCANA Energy Marketing, Inc. Over the years, I have held varying positions of increasing responsibility including Energy Services Coordinator, where I was responsible for scheduling gas for the Atlanta Gas Light System; project manager for the implementation of an automated gas management system; and Manager of Operations. In 1998, I became responsible for gas procurement, interstate pipeline and local distribution company scheduling and preparation of gas accounting information. In May 2002, I became Manager of

Operations and Gas Accounting with SCANA Services, now DES Services, where I was responsible for gas scheduling on interstate pipelines and gas accounting for all SCANA subsidiaries. In November 2003, I became Fuels Planning Manager where I assisted all SCANA subsidiaries with strategic planning and special projects associated with natural gas. I held this position until promoted to General Manager – Supply and Asset Management in December 2005. On January 1, 2021, I became the Director of Gas Supply Services for DES.

Q. WHAT ARE YOUR DUTIES AS DIRECTOR - GAS SUPPLY SERVICES?

A. In regard to Dominion Energy South Carolina, Inc. ("DESC" or the "Company") concerning this proceeding, I am responsible for gas supply and asset management functions. Specifically, my responsibilities include the oversight of planning, procurement of supply and capacity, nominations and scheduling, gas cost accounting, state and federal regulatory issues concerning supply and capacity, and asset and risk management.

Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY.

A. The purpose of my testimony in this docket is two-fold. First, I discuss DESC's portfolio of gas supply, addressing the various gas supply and transportation options available to the Company. Second, I discuss the state of the natural gas market during the period of August 1, 2020, to July 31, 2021 ("Review Period").

I. GAS SUPPLY

Q. PLEASE EXPLAIN THE GAS SUPPLY OPTIONS CURRENTLY AVAILABLE TO DESC.

A. There are three gas supply options that are available to DESC: (1) wellhead gas supply, (2) underground storage, and (3) liquefied natural gas ("LNG"). DESC's gas asset portfolio includes each of these supply options, and the Company has combined these supply options with interstate transportation to meet its firm demand under varying weather conditions at reasonable cost.

Q. PLEASE DESCRIBE THE AVAILABLE INTERSTATE PIPELINE TRANSPORTATION OPTIONS.

A. DESC purchases interstate pipeline transportation capacity on both a firm and interruptible basis from the three (3) interstate pipelines that provide service to DESC: Southern Natural Gas Company ("Southern"), Transcontinental Gas Pipe Line Corporation ("Transco"), and Carolina Gas Transmission, LLC ("CGT").

Interstate Firm Transportation ("FT") service permits DESC access to interstate pipeline transportation capacity on a priority basis. Interruptible Transportation ("IT") service is only available when FT customers, such as DESC, are not using their FT capacity. IT service is curtailed when FT customers use their capacity. In sum, FT and IT services use the same physical pipeline capacity, with FT service having priority. DESC contracts for FT service from the three interstate pipelines serving South Carolina to ensure delivery of natural gas during colder

periods when the full transportation capacity of these pipelines is used and when the demand for natural gas service is typically greatest. DESC currently holds 161,144 dekatherms ("Dt") of firm capacity on Southern and 160,458 Dt of firm capacity on Transco, which includes the addition of 90,000 from the Southeastern Trail Project which entered service on January 1, 2021. During the Review Period, DESC held 397,427 Dt of firm capacity with CGT during the winter heating season to deliver gas from Transco and Southern and from DESC's in-state LNG facilities to DESC's system. The Company acquired through an open season an additional 4,900 Dts per day on CGT, beginning on November 1, 2021. Exhibit No. __ (RMJ-1) provides a summary of the firm transportation and storage contracts by pipeline supplier.

DESC has entered into a precedent agreement subscribing to 62,500 Dt per day of capacity for its natural gas operations on the Mountain Valley Pipeline ("MVP") project. This capacity will provide DESC access to the Marcellus natural gas basin which will feed into the Southeastern Trail capacity. DESC has been informed that this capacity is currently expected to be in service by mid-summer 2022. However, the MVP project has experienced prior delays in its previous expected in-service dates because of ongoing legal challenges associated with permits to cross water bodies and wetlands.

Q. HOW DOES DESC OPTIMIZE ITS FIRM TRANSPORTATION CAPACITY?

A. DESC optimizes its firm transportation capacity through "segmentation" which allows DESC to deliver up to twice as much supply on a portion of its firm capacity while paying only one demand charge. Interstate pipelines allow segmentation as long as the delivery point meter has sufficient capacity and gas supply does not cross the same delivery point.

Q. HAVE THERE BEEN ANY CHANGES AS TO HOW DESC OPTIMIZES ITS FIRM TRANSPORTATION CAPACITY?

A. No. As a result of the DESC Electric Department's increased need for gas capacity, the 2015 Memorandum of Understanding ("MOU") approved by the Public Service Commission of South Carolina ("Commission") in Docket No. 2015-5-G eliminated sharing of 27,000 Dt per day of interstate transportation base capacity between DESC's Electric and Gas Departments on October 31, 2016. However, the 2015 MOU maintains the ability of the departments to share gas transportation capacity on an interruptible basis as conditions warrant. The MOU also allows the departments to allocate transportation capacity; therefore, the Gas Department continues to have access to 27,000 Dt in Zone 1 of the DECGT system. As stated above, the Company contracted for 27,000 Dts per day of winter only firm transportation on Elba Express for a two-year term to supply the 27,000 Dt of Zone 1 capacity on DECGT.

Also, as part of the MOU sharing arrangement, and beginning November 1, 2020, the Gas Department received an additional 18,498 Dts per day of Zone 1 capacity on DECGT which was acquired by DESC on December 1, 2015. Prior to the execution of the contract for this 18,498 Dts per day of Zone 1 capacity, the Gas and Electric Departments had agreed that the Electric Department would hold the capacity prior to November 1, 2020; and the Gas Department would hold the capacity after that date.

Q. WHAT INTERSTATE STORAGE ASSETS ARE AVAILABLE TO THE COMPANY TO AID IN DELIVERING RELIABLE AND SECURE GAS SERVICE TO DESC CUSTOMERS?

A. The Company currently has 4,908,848 Dt of storage capacity on Southern's system, with maximum daily withdrawal capability from this storage equaling 99,121 Dt per day at peak storage inventory. On Transco, DESC subscribes to 593,735 Dt of storage capacity, with a maximum withdrawal quantity of 19,789 Dt per day at peak storage inventory. Exhibit No. ___ (RMJ-1) reflects total storage and withdrawal capacity by pipeline supplier in a table format.

Q. PLEASE DESCRIBE THE LNG FACILITIES AND THEIR CAPACITIES.

A. DESC owns and operates two LNG facilities: one at Bushy Park near Charleston which can liquefy and store up to 980 million cubic feet ("Mmcf") of LNG, and the other at Salley in Orangeburg County, which can store up to 900

Mmcf of trucked-in LNG. LNG must be transported to Salley via truck because Salley has no liquefaction facilities.

Q. AT WHAT VAPORIZATION RATE CAN DESC USE THESE FACILITIES?

A. The combined storage capability of these facilities allows our system throughput planning to assume a maximum daily withdrawal quantity of 105 Mmcf/day. For example, assuming that storage volumes are at maximum capacity, Bushy Park's inventory would be exhausted in approximately 16 days if operated at a withdrawal rate of 60 Mmcf/day, and Salley's inventory would be exhausted in approximately 20 days if operated at a withdrawal rate of 45 Mmcf/day.

Q. WHAT BENEFIT DO THESE LNG ASSETS PROVIDE THE COMPANY?

A. DESC relies primarily upon its LNG assets to fulfill the peaking needs of its system and customers. Additionally, the on-system LNG service significantly adds to the reliability and security of gas supply during unfavorable operating conditions that may occur from time to time. For example, DESC's supply of gas could be unexpectedly interrupted because abnormally cold weather creates a spike in demand which in turn causes equipment malfunctions, well freeze-ups, and other operational anomalies thereby limiting the supply of gas into South Carolina. In these instances, DESC could employ the use of its on-system LNG facilities for a limited time to offset or reduce any adverse effects caused by an upstream interruption.

Attached hereto as Exhibit No. ___ (RMJ-2) is a comparison of DESC's firm sales service to its capacity to deliver gas to serve firm demand. This exhibit indicates that the Company will have firm assets sufficient to provide a 5.14% system-wide operating reserve (excluding segmentation) during the upcoming winter heating season. This operating reserve is conditioned on the availability of the LNG facilities.

Q. DO YOU ANTICIPATE ADDITIONAL INTERSTATE CAPACITY NEEDS IN THE NEAR FUTURE?

A. Yes. DESC will require additional interstate pipeline capacity in order to meet future design day forecasts as a result of (1) demand growth on its system for natural gas and (2) the inability to rely on segmentation between certain geographical regions, or area points, to the degree it has in the past.

The three interstate natural gas pipelines that serve DESC have indicated that, based on current contracts, they are fully subscribed. Typically, interstate pipelines are designed with little to no unsubscribed capacity therefore requiring advance notice to build facilities for additional natural gas throughput. As such, DESC continues to evaluate new interstate projects available in the marketplace and to seek opportunities to participate in larger interstate pipeline projects which may provide a benefit due to the economies of scale associated with such future projects.

Q. WHY IS DESC UNABLE TO RELY ON SEGMENTATION TO THE DEGREE IT HAS IN THE PAST?

A. DESC may no longer have the flexibility to rely on segmentation to meet design day needs between area points to the degree it has in the past due to more businesses subscribing to the CGT pipeline to serve increased firm demand on the CGT system. Historically, DESC has reviewed its firm capacity needs on a system-wide basis and relied on segmentation to meet design day needs between area points. However, as its ability to rely on segmentation decreases, DESC will be required to look at its system growth in more detail by area points rather than on a system-wide basis in order to determine where new facilities will need to be constructed and to contract for any necessary additional firm transportation by area points.

Q. HOW DOES DESC UTILIZE ITS COMBINED INTERSTATE STORAGE AND ON-SYSTEM LNG TO ENSURE RELIABLE GAS SERVICE?

A. There are two dimensions to storage services: peak capability and duration. DESC uses its storage to address both of these dimensions. Certain storage services are designed to meet spikes in demand on very cold days but only for a short period of time. The storage services in DESC's portfolio of this type include Transco LNG Storage Service and both the Bushy Park and Salley LNG facilities located on DESC's system. Accordingly, these storage services provide DESC with system reliability and peaking capability.

Other storage services are geared toward meeting demand over more of the winter period and not only on the coldest days. As set forth in Exhibit No. ___ (RMJ-1), the storage services in DESC's portfolio of this type include Transco Washington Storage Service ("WSS"), Transco Eminence Storage Service ("ESS"), Transco General Storage Service ("GSS") and Southern's Contract Storage Service ("CSS"). Therefore, these storage services provide DESC with duration capability. Through the active management of these assets, DESC is able to meet the needs of its firm customers on the coldest days of the winter and over the entire winter.

Q. PLEASE DESCRIBE THE CONSIDERATIONS EVALUATED BY DESC IN ASSEMBLING ITS GAS SUPPLY PORTFOLIO.

A. The Company's evaluations for assembling its gas supply portfolio include reviewing the gas supply, storage, transportation, and other assets already under contract. Other considerations include such things as geographical delivery limitations, maximum volumes, storage ratchets, and the cost of the various services. DESC then compares the resources against the firm demand under varying weather conditions. Finally, the Company determines whether additional resources are required to serve the firm demand.

Q. PLEASE DESCRIBE THE USE OF EACH OF THESE VARIOUS SERVICES WITHIN THE PORTFOLIO.

A. DESC places different levels of reliance on its various supply sources based on the time of year in question. Decisions related to the purchase of gas supply are based upon the best information available to DESC at the time of execution. During the winter heating season, the Company uses its wellhead gas as its principal supply, followed by the use of its natural gas supply stored in underground storage facilities. DESC primarily uses its on-system LNG to meet the last increment of demand on the coldest days or hours of the year.

As the winter progresses, this order of usage may be modified. For example, if South Carolina experiences mild weather during the early part of the winter and storage inventories are relatively high, then underground storage and LNG withdrawals may be used instead of wellhead supply.

II. NATURAL GAS MARKET

Q. PLEASE DISCUSS THE STATE OF THE NATURAL GAS MARKET DURING THE REVIEW PERIOD.

A. Domestic natural gas supply continues to be the lowest priced and most abundant supply in the global natural gas market primarily due to domestic shale production. However, the cost of building new interstate pipeline infrastructure to move shale production continues to rise due to the amount of greenfield pipeline required to move supply from areas in the Northeast such as Marcellus and Utica to

market. Interstate pipeline flows are also changing direction. Historically, interstate pipelines have moved gas from the Gulf of Mexico to the Northeast. Developed, current and proposed pipeline projects are reversing the flow to move gas from North to South. Further, the construction timeline to build interstate pipeline capacity is increasing due to more scrutiny from regulators, special interest groups and the public. New capacity projects are estimated to take five (5) years or more before they can be placed into service, assuming they can overcome anticipated legal challenges and be completed.

Regarding natural gas prices, the market began the Review Period in the $2.00 per Dt area. Prices per Dt traded as high as the mid $2.70s during the month of August due to electric demand and increase in LNG exports before the market tested lower, establishing the low for the Review Period at approximately $1.80 per Dt on September 21, 2020, as a result of cooler than normal temperatures during the second half of September that reduced electric demand. Prices per Dt then increased to the high $3.30s by late October. Prices per Dt bounced between this $3.30 area on the high end and the $2.20s on the low end until late June when the market broke above $3.40 per Dt as growth in natural gas demand outpaced supply due to increased LNG exports coupled with storage inventory levels that were behind five year averages. Prices reached the peak for the Review Period on July 26, 2021, at approximately $4.19 per Dt.

Q. PLEASE DESCRIBE THE TOOLS THAT THE COMPANY UTILIZES TO MITIGATE PRICE VOLATILITY TO ITS CUSTOMERS.

A. The Company relies on the approved 12-month rolling purchased gas adjustment mechanism, as described in more detail by Company Witness Elliott, and physical gas storage to mitigate price volatility to its customers.

III. COMPANY REQUESTS

Q. IN REGARD TO THE COMPANY'S PURCHASING PRACTICES, WHAT ARE YOU REQUESTING OF THE COMMISSION IN THIS PROCEEDING?

A. During the Review Period, DESC contracted for sufficient supplies of natural gas and provided reliable service to its customers. DESC also adequately maintained gas, storage, and transportation assets for its system during the Review Period at levels that were prudent and reasonably met the reliability and service needs of the system. It is my opinion that DESC's acquisition and management of these assets during the Review Period has been prudent and reasonable. Therefore, I respectfully request the Commission find that DESC's cost for gas purchases and asset management were reasonable and prudent for the Review Period.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Exhibit No. ___(RMJ-1)

Dominion Energy South Carolina
Existing Firm Transportation Contracts

	Transportation			Storage			
		Transportation Dt/Day	Expiration Date	Type	Maximum Storage Quantity (Dth)	Maximum Daily Withdrawal Quantity	Contract Expiration Date
Southern							
FSNG349 FT	Firm Transportation	44,078	August 31, 2022	CSS	4,908,848	99,121	August 31, 2022
FSNG349 FTNN	Firm Transportation	80,472	August 31, 2022				
FSNG349 FT	Firm Transportation	36,594	August 31, 2022				
		161,144					
Transco							
Z1 - Z5	Firm Transportation	3,209	December 30, 2024	ESS	115,846	13,854	September 30, 2029
Z2 - Z5	Firm Transportation	4,720	December 30, 2024	GSS	26,366	503	March 31, 2023
Z3 - Z5	Firm Transportation	3,587	December 30, 2024	WSS	447,938	4,715	March 31, 2022
Z3 - Z5	Firm Transportation	7,360	December 30, 2024	LNG	3,585	717	October 31, 2021
Station 65 (Sunbelt)	Firm Transportation	39,606	October 31, 2023	Total Transco	593,735	19,789	
Station 85 (Sunbelt)	Firm Transportation	6,170	October 31, 2023				
FT	Firm Transportation	5,806	March 31, 2084				
FT - SET	Firm Transportation	90,000	December 31, 2035				
		160,458					
				DESC On-System LNG (in mcf)			
Carolina Gas Transmission (CGT)	Firm Transportation	1,500	April 30, 2028	DESC	1,880,000	105,000	
	Firm Transportation	7,500	October 31, 2026				
	Firm Transportation	12,000	October 31, 2036				
	Firm Transportation	50,000	February 29, 2048				
	Firm Transportation	5,000	March 31, 2035				
	Firm Transportation	600	March 31, 2035				
	Firm Transportation	5,000	March 31, 2030				
	Firm Transportation	400	March 31, 2030				
	Firm Transportation	18,498	November 30, 2030				
	Firm Transportation[(1)]	4,900	March 31, 2030				
	Firm Transportation	296,929	October 31, 2026				
		402,327					

[(1)]Transportation Contracts commence November 1, 2021

Note: The Transco and Southern systems interconnect with the CGT system at a number of metering stations. Supply transported using the firm capacity contracted for the Southern and Transco systems are, in most instances, delivered to Dominion Energy South Carolina's ("DESC") 96 delivery points by DECGT. Thus, firm transportation capacity on the Transco and Southern systems cannot be aggregated with the firm transportation capacity on CGT to reflect accurately the firm transportation capacity available to deliver gas to DESC's customers.

Exhibit No. ___(RMJ-2)

Dominion Energy South Carolina
Available System Wide Capacity to Serve Firm Sales Service Demand

	2021-22 Winter Reserve Capacity (Dt)
CGT Firm Interstate Capacity	402,327
DESC Shared CGT Interstate Capacity	27,000
Segmented CGT Interstate Capacity[(1)]	-
Total Capacity to Deliver Gas to DESC via CGT	429,327
DESC's Peak Design Day Demand (Firm Sales Service to Customers)	446,403
Less: Direct Connect Firm Sales Service Customers	38,061
Net DESC Firm Sales Service Customers behind CGT	408,342
Reserve dts	20,985
Reserve %	5.14%

[(1)] Segmented Capacity utilizes existing Firm DECGT capacity at no additional demand cost.